# IBM Corporate Employee Attrition Analysis

#### INTRODUCTION

The Employee Attrition Analysis system is to understand the sentiments of highly disengaged and unhappy employees before it's too late. And thereby, reduce the employee churn by identifying problem areas automatically via Al-powered insights using ML tools.



#### PROBLEM STATEMENT

Nowadays, employee attrition became a serious issue regarding a company's competitive advantage. Employees are the most important part of an organization. Successful employees meet deadlines, make sales, and build the brand through positive customer interactions. It's very expensive to find, hire and train new talents. It's more cost-effective to keep the employees a company already has. A company needs to maintain a pleasant working atmosphere to make their employees stay in that company for a longer period. A few years back it was done manually but it is an era of machine learning and data analytics. Now, a company's HR department uses some data analytics tool to identify which areas to be modified to make most of its employees to stay. Employee attrition is a major cost to an organization and predicting such attritions is the most important requirement of the Human Resources department in many organizations. In this problem, prediction of the attrition rate of employees of an organization is taken place.



#### PROBLEM SOLUTION

The solution to the problem is Machine learning, which is one of the applications of Artificial Intelligence, is being used to implement the proposed system. Employee Attrition Analysis system is going to predict the attrition rate based on employee satisfaction, work environment etc. Finding the sentiment of employee is a challenging task. Other important issues is to identify daily mood recognition, emotion detection, environment, need for hike, employee satisfaction, employee contributor and work progress. To overcome all these issues this predictor has been proposed.

Nowadays a lot of research and work is being implemented in the smart and modern employee sentiment analysis domain. The Gradient Boosting or GBM is an ensemble machine learning algorithm that can be used to build the predictor model. These are the models to predict the employee attrition rate



#### THE BENIFICIAL USERS

- HR
- Management (Company)
- Other job-seekers
- Industrial people
- Team Leads
- Clients

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#### **VALUE FOR SOCIETY**

Employees are the most important part of an organization that influences a company's economic growth. Many new technologies, such as Machine Learning are being implemented into the management so that it is easier for the HR and the technical team to recognize and improve the environment or giving hikes and subsidiaries.



## VALUE FOR ENVIRONMENT

- In the employee attrition analysis system, the work progress, emotions on frequent intervals will predict the attrition rate.
- For the employee attrition analysis system, the manager can input the environment data, mood detection data and the system will predict the attrition rate and then the improvements can be made.
- For this system, the user can give details about the environment, work progress, emotion that will give the rate of attrition as output. This can help improve and retain the employees.



Predicting the employee attrition rate, analysing the mood and emotions makes it easier for the HR and the management as it provides result in minimal effort and time. This action adds a lot of value to the company and the business in society.



### FORM FACTORS

Our employee attrition analysis system for the attrition rate prediction is in the form of web application to provide this valuable service to the environment and society.













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